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SWEDEN'S FOOD SUPPLY

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From early times it has been customary to give agriculture as the chief industry of Sweden. Today the country does not possess the same right to that description it once did. In the first place the number of persons engaged in agriculture has not increased in the same proportion as the population of the country. Where 82 per cent of the entire population was dependent on agriculture during the "twenties" and "thirties" of the last century, only 48 per cent was so classed in the last census in 1910. This decrease occurred simultaneously with an increase of crops produced, which means that greater economy has begun to be practiced with expensive human labor. Yet the fact remains that the diminished labor supply has in many places made it distinctly difficult to successfully carry on the work with undiminished intensity. While there has been a steady increase in the area of cultivated land and the crops obtained from it, this growth has not kept pace with the greater food needs of the population. In some earlier periods Sweden had a considerable surplus of grain but now she is obliged to import very large quantities of cereals.

In this connection it must be considered that agriculture, which in the middle of the nineteenth century was the *only* important Swedish industry, is now considerably exceeded in product value by the commodities turned out by the nation's factories. In other words, Sweden is more and more becoming a manufacturing country. Climate has probably been the most important factor in this change. It is incontestable that Sweden considering its northerly latitude is wonderfully favored in point of climate. And it is only fair to admit that we have America to thank for this to a very great extent in furnishing us with that marvelous thing—the Gulf Stream—on which I hope an embargo will never be placed.

But the life-giving warmth of the south is lacking. Most of the cultivated species in Sweden have to be grown in latitudes farther north than is favorable to them. The feeble sunshine of the north allows only a short growing period; night frosts are frequent. On the whole it might be said that the farther north, the greater the

cost of producing a crop of cultivated plants. It is therefore no marvel that agriculture is difficult, especially in rivalry with countries that possess more beneficent sunshine.

Rye and wheat are the two main bread producers in Sweden. Some barley is used in northern Sweden for bread making, but corn so far is unknown as a bread material. The yearly consumption of rye and wheat amounts to something over one million tons, or, in round figures, 40,000,000 bushels. An average rye crop in Sweden is about 600,000 tons or 24,000,000 bushels. Home grown wheat crops are usually about 220,000 tons or 9,000,000 bushels, making a total crop of bread cereals that approximates 33,000,000 bushels counting wheat and rye. Add to these figures the average yearly import of these grains, which is 12,000,000 bushels—mostly wheat—and deduct 5,000,000 bushels needed for seed and there remains a difference of about 40,000,000 bushels of rye and wheat needed each year to feed the Swedish population.

It might be of interest to know from which countries Sweden filled its pre-war grain requirements. In 1913, or the last year before the outbreak of the war, Sweden imported 8,500,000 bushels of wheat, of which 2,500,000 bushels came from Russia, 2,000,000 bushels from Germany, 700,000 bushels from Argentina and about 1,000,000 bushels each from the United States, India and Denmark. During the same year, 1913, 4,000,000 bushels of rye were imported, 3,000,000 bushels coming from Germany and the remainder from Russia.

These figures reveal the fact that before the war at least two-thirds of Sweden's grain cereal imports—12,500,000 bushels—came from the now belligerent nations, Russia and Germany. When, at the outbreak of the war, Sweden could not import grain from those countries and had to fill her requirements from other markets, it was only natural that she should turn to the United States.

In 1916 Sweden imported 12,000,000 bushels of wheat and rye, something less than the 1913 purchases. The United States furnished about 80 per cent, or 9,720,000 bushels, and Argentina provided the remainder—about 2,000,000 bushels. As will be seen from these figures, Sweden did not import more grain during 1916 than before the war, but actually bought a smaller quantity and changed the sources of her imports from Germany and Russia to the United States.

At the end of 1916, when shipping difficulties became more and more acute, the Swedish government took the precaution to take over all stocks of grain and flour and put the entire nation on a bread ration. In the beginning this ration was fixed at 12 kilograms (26.5 pounds) of bread grain a month for each person enrolled in the agricultural class, and 250 grams, or 9 ounces of flour a day for all other citizens.

During March of 1917 an inventory of the nation's grain stock was completed and it was discovered that the stores were much smaller than had been calculated. An error had been made in calculating the 1916 crop and it was immediately decided to cut down the bread ration considerably. The new ration, it was decided, should be 10 kilograms (22 pounds) a month for each person in the agricultural class and 200 grams, or 7 ounces daily, for all other individuals.

Lately the proposition has been under consideration to further diminish the bread ration because of the serious doubt as to whether the old crop would be sufficient to last until the new harvest, grain from which may be expected to reach the market about the middle of November. I hope this course has not been deemed necessary because it would bring a great part of our people to the brink of starvation. The seven ounce ration is small enough; in fact it is the smallest I know of in any country in the world, including Germany.

The German bread ration, I have been told, was some months ago increased to 1,950 grams (69 ounces) per person per week, whereas the Swedish ration gives only 1,400 grams (50 ounces) to each person per week—or, in other words, the Swedish ration is 25 per cent less than the German.

It should be mentioned in this connection, however, that to those individuals among the Swedish working class who have especially hard work to perform, an extra allowance of flour is given, depending entirely on the occupation of the individual. In some cases—with his extra flour allowance—the Swedish workman gets nearly the same ration as the German civil workman.

Some time must elapse before the 1916-17 crop figures are available. With a satisfactory harvest and with a good potato crop this year it would have been possible to maintain the present bread ration during 1917-18, even though foreign grown grain was unavailable.

I am sorry to say, however, that there is no prospect today for a medium good grain harvest. Owing to unfavorable weather conditions during the fall of 1916 the sowing of winter wheat and rye was delayed, and the winter frosts found the plants small and delicate. This, taken in connection with unfavorable conditions during the winter and the severe frosts of April and May, caused a total failure of the winter rye in certain sections and a partial failure in other parts, and the entire crop, including the wheat, was very poor at the beginning of the summer. June and July brought a severe drouth spoiling the small remaining prospects of the winter grain and also greatly hindered the development of spring grain. I am sorry to state that today it can safely be said that both winter and spring grain will show a considerable shortage for 1917. The winter crop will be approximately 12,000,000 bushels below normal.

It will scarcely be possible to fill this shortage by a greater use of spring grain, because the spring crops are for the most part oats, barley, etc., and are unsuitable for bread making, being really fodder crops, and short at that, promising only enough food for livestock use during the winter, since the hay crop is also short and since imported fodder will be difficult to secure from abroad, if it can be secured at all.

In brief, the Swedish grain crop is about 12,000,000 bushels short of normal production. With an average crop it is necessary for us to import 12,000,000 bushels. Consequently, this year we will need 24,000,000 bushels of grain from abroad in order to have the same standard of living as before the war. Thanks to our government's foresight in introducing bread rationing in good time, we have saved about 12,000,000 bushels, or 30 per cent of the pre-war annual consumption of bread grains. We must, however, import 12,000,000 bushels of some sort of breadstuff during 1917-18 if we manage to maintain the present bread ration, which, as I have stated, is probably the smallest in the world, and is at least 25 per cent less than the German allowance.

Sweden particularly recognizes the value of the potato as a foodstuff of the greatest importance for man and beast. Our crop in 1913 was about 2,000,000 tons; in 1914, 1,700,000 tons; in 1915, 2,100,000 tons, but in 1916 we harvested only 1,500,000 tons of potatoes. During the war there has been no import or export trade in this commodity. As to the prospects of the potato crop I think

it would be safe to say that we might expect a medium crop and if the weather conditions continue to be favorable, it might even be a little better.

One other important nutriment is produced from Swedish soil; sugar, made from beets. The production of refined sugar amounted to 126,000 tons during 1913; in 1914 the output was 137,000 tons; in 1915, 143,000 tons, but in 1916, owing to decreased acreage and to inferior quality and quantity of the sugar beet crop, only 122,000 tons of refined sugar were produced. Because of the excellent 1914 and 1915 crops, Sweden was able to help her friend and neighbor Norway with 15,000 tons of sugar, the only sugar that has been exported during the war. Statistics show that there was a considerable increase in Swedish domestic consumption of sugar in 1915 and 1916. This was due to the fact that the government fixed a maximum sugar price, making it one of the cheapest nutriments on the market. The low price, however, had one great drawback, it brought about the reduction in acreage and lessened the cultivation of sugar beets. The decrease in sugar production during 1916, and the greatly increased sugar consumption, made the sugar situation rather serious in the latter part of 1916, which influenced the government to ration sugar in the following manner:

(1) Factories using sugar (including bakeries, chocolate, candy and soft drink factories), will receive about half the yearly quantity they had used during the previous two years.

(2) Each individual will receive 13 kilograms of sugar a year and in addition a small quantity will be allowed each household for preserving purposes.

In the foregoing I have given a short résumé of the Swedish situation in regard to bread and other starch-giving foods.

Hardly less important, however, is the fodder production on which depends the cattle raising industry. Our fodder crops are oats, barley and mixed grain, with certain quantities of straw and hay, which has never been sufficient to feed our livestock. Even before the war, it was necessary to import oil cake and corn in order to supplement the stocks of native grown fodder. Approximately 1,300,000 tons of oats are generally produced each year, with the exception of the 1914 crop, which was unusually short, 40 per cent below normal in fact, with the total production approximating 800,000 tons. Our barley crop is usually 300,000 tons annually, and we

produce about 350,000 tons of mixed grain each year. The hay crop, as a general thing, is between five and seven million tons annually.

Until 1916, the annual import of cotton seed cakes was 150,000 tons. That at least was the figure for 1913, 1914 and 1915. In 1916 this figure was reduced about one-half and in 1917 there was a still greater reduction. Corn was imported at the rate of 50,000 tons a year during 1913, 1914 and 1916. In 1915 this figure increased to more than 200,000 tons, which is accounted for by the unusually poor oat crop in Sweden during 1914 when the total yield was between 500,000 and 600,000 tons below normal.

As a consequence of cutting off almost entirely the importation of cotton seed cake and corn during 1916, and because of the poor 1917 fodder crop as well as the indifferent harvests of oats, barley, mixed grain and hay, it will be necessary in the near future to slaughter or export a considerable part of the nation's cattle and swine. It is hardly necessary to dwell on the enormity of a national calamity endangering the national production of meat, milk and butter, by being forced to kill off the country's livestock. Extensive stock killing will for the time being flood the market with more meat than can be consumed causing an overproduction of one kind of food, but in the end the cattle loss will be badly felt especially when the war is over and business tries to revert to pre-war conditions.

SWEDEN'S WAR TIME FOOD EXPORTS

Much misinformation has been published in the press and generally believed by the public, under the general subject of "Sweden is Feeding Germany." Only the other day I read that 5,000,000 bushels of wheat have been shipped from Sweden to Germany during the war. This statement, like most of the others I have read, is absolutely wrong.

It is a pleasurable duty to give the correct export figures to this American audience. During the war Sweden has exported the following quantities of wheat to Germany: 45 tons or 1,800 bushels in 1914; 30 tons or 1,200 bushels in 1915; 40 tons or 1,600 bushels in 1916 and during 1917, nothing at all. During the entire three years of war the total exports of wheat have been less than 5,000 bushels. Absolutely no rye has been exported from Sweden during the war.

Of Swedish oats, nearly 500,000 bushels were exported during

1916, but during the years 1914, 1915 and 1917 not a single pound has been exported. Just 180 tons of barley were exported during 1916—the only exports of any year during the war. No corn has been exported during the war.

About 1,200 tons of rolled oats and partly spoiled barley were exported to Germany during 1916, part of which was sent for the relief of the starving population of Lodz in Poland. Finally 2,200 tons of malt were exported to Germany during 1916.

All told there has been a total of 10,695 tons of grain and malt exported during the entire war. Of this amount the greater part was oats, and only an insignificant portion was wheat. Considering that Sweden's total yearly consumption of all sorts of grain amounts to 3,000,000 tons a year, which for the three years of war makes in round numbers, 9,000,000 tons, the total export during the entire war was about one-tenth of 1 per cent of Sweden's total grain consumption—certainly an insignificant amount. It is hardly necessary to state that at the present time, or during the present year, there can and will be no export of grain in any form from Sweden.

Regarding the situation concerning cattle, meat and dairy products, I must say, in times past Sweden used to export considerable quantities of oats, which, however, has ceased since the country began to raise cattle on a larger scale. Sweden had, at the beginning of this year, about 3,000,000 head of cattle. In 1913 we exported 42,000 animals; in 1914, 80,000; 1915, 36,000; 1916, 14,000. Broadly speaking, 1 per cent of the nation's entire cattle stock was customarily exported, except in 1914, when the oat crop dropped 40 per cent, approximately 3 per cent of the national stock being sold abroad. For years before the war, Germany and Denmark bought the greater portion of our export cattle.

The actual meat export figures for four years past are: 1913, 5,000 tons; 1914, 7,500; 1915, 11,700; 1916, 5,000. I must emphasize the point that this export business is not a war industry but existed long before the war. And also that shortage of food at home caused the trade to fall off considerably in 1916, and to diminish to virtually nothing this year. Pork exports before the war increased yearly. In 1913 we exported 8,000 tons of pork and in 1914 the pork exports increased to 15,000 tons. The 1915 exports totalled 19,000 tons and reached a maximum. In 1916 the export pork tonnage was 14,000, while at the present time all export of pork

from Sweden has ceased, and we are importing pork under a special arrangement from Denmark.

It is regrettable that Sweden has not been able to uphold the export of her pork to England during the war and that a greater part of it has gradually gone to Germany, especially in 1915. The natural and only explanation is that pork exporters, in order to get the high cost of production covered, chose the market that offered the best transportation facilities, the highest prices and the best conditions of payment, which conditions Germany undoubtedly fulfilled. Many efforts have been made to maintain the export of pork to England but these have all been in vain, as the prices offered and other conditions were too unfavorable.

Butter is one of Sweden's most important export articles and has been for many years. Before the war we exported about 20,000 tons annually. During 1914 and 1915 this amount decreased and in 1916 it had reached the low figure of 13,000 tons. During the present year all export of butter has ceased and Sweden is now *importing* butter from Denmark under special agreement. The same reasons given for the decline of English-Swedish pork trade and the turning of this business to German firms—also apply to the butter business.

The diminution of Sweden's butter exports is intimately connected with the cessation of Swedish production of margarine. Sweden manufactures and consumes, during normal years, about 30,000 tons of margarine, made principally from imported raw materials. The importation of fats and oils needed for margarine production ceased entirely during 1916.

Sweden had an important pre-war export trade in milk, cream and cheese. Denmark bought the milk, Germany the cream and Switzerland the cheese. During the war the export of these commodities gradually diminished and ceased altogether during 1917.

I would like to give you some figures showing what Sweden's meat export to Germany really meant to that country during the war. I say "meant" because such export, worth mentioning, does not exist any more. In 1915 Sweden's total export of all kinds of meat to Germany was only 28,400 tons. In 1916 the total amount was 20,000 tons. Both figures include pork and live cattle. Estimating Germany's population at 65,000,000, the export figures mentioned above indicate that each individual in Germany received

about 430 grams, or about one pound of meat and pork all told during the entire year 1915. In 1916 the corresponding figure was 310 grams or 11 ounces.

I hope the remarks I have had the opportunity of making before this distinguished audience will help to give an idea of the conditions in my country and of the grave problems Sweden is now facing. It is not only foodstuffs we lack, but also such articles as oil, coal, and many kinds of raw materials. The lack of lubricating oil, to take one example, will in a month or two put hundreds of thousands of Swedish workmen out of employment. It is to America, that we, like other countries, are looking for relief in our precarious situation.

I am a great believer in "give and take," and hate one-sided agreements. Today, money alone is not consideration enough for America's products, and Sweden offers in exchange for the American goods she so badly needs, such Swedish products as our good iron ore, our high grade steel, or wood pulp and other commodities, facilities and guarantees which are in our power to give.

The American government has taken into her own hands control of the export of American products. This means, I know, a square deal to everybody. It is a tremendous task this country has undertaken, and means virtually, the rationing of the greater part of the world—her allies as well as the neutral nations.

An organization to handle this immense job cannot be put into shape over night. It is only natural that America shall want to find out first what her own resources are, and then how much she needs for her own people and for the nations allied with her in this great war. And when these facts are ascertained she will know how far she will be able to satisfy the neutral countries dependent upon her.

That everything will be done to avoid unnecessary hardship and suffering in any of the neutral countries is the belief of everybody who knows the American people, their government, American ideals and what America stands for in this war.